

Mr. Dennis Parks  
MascoTech Sintered Components of Indiana, Inc.  
3100 North State Highway #3  
North Vernon, Indiana 47265

Re: Significant Source Modification No:  
**079-10884-00014**

Dear Mr. Parks:

MascoTech Sintered Components of Indiana, Inc. pursuant to CP 079-9994-00014 issued on February 1, 1999 was directed to apply for a Part 70 operating permit for the hot forging carbon steel rod manufacturing source. An application to modify the source was received on April 22, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Six (6) automated deflash machines, known as EU-AD10 through AD-15, each equipped with a self-contained aerocology unit (dust collector), known as ADA10 through ADA15, exhausting through general plant ventilation, capacity: 2,183 pounds of carbon steel rods per hour.
- (b) Sixteen (16) rework sanders, known as EU-G1 through EU-G8, each equipped with a dust collector, known as D1P through D8P (primary deflash dust collectors) for EU-G1 through EU-G8, and as D1S through D8S (secondary deflash dust collectors) for EU-G9 through EU-G16, all exhausting through general plant ventilation, capacity: 491.41 pounds of carbon steel rods per hour, each.
- (c) Two (2) shot peen machines, known as EU-SP6 and EU-SP7, each equipped with a self-contained dust collector, known as SPD6 and SPD7, exhausting through plant general ventilation, capacity: 2,118.17 pounds of carbon rods per hour, total, and 144,000 pounds of steel shot per hour, total.

and the following insignificant activities:

- (d) Two (2) double disk grinders, known as DD5 and DD6, equipped with a wet process for PM control, capacity: 2,139.56 pounds of carbon steel rods per hour, total.
- (e) Four (4) compacting presses, known as CP6 through CP9, capacity: 2,189.08 pounds of powdered carbon steel and lubricant per hour, total.
- (f) Four (4) 200-amp electric delube furnaces, known as A8 through A11, exhausted through Stacks AS8 through AS11, capacity: 2,183 pounds of powdered carbon steel per hour, total.
- (g) Seven (7) 300-amp electric rotary hearth furnaces, known as B10 through B16, exhausted through Stacks BS10 through BS16, total capacity B10 through B15: 2,183 pounds of carbon steel rods per hour and capacity B16: 813.22 pounds of carbon steel rods per hour.
- (h) Seven (7) forge presses, known as F10 through F16, total capacity F10 through F15: 2,161.17 pounds of carbon steel rods per hour, capacity 16: 807.14 pounds of carbon steel rods per hour.

- (i) One (1) magna flux machine, known as MF7, capacity: 2,104.91 pounds of carbon steel rods per hour.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter should be directed to Frank P. Castelli, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
FPC/MES

cc: File - Jennings County  
U.S. EPA, Region V  
Jennings County Health Department  
Air Compliance Section Inspector - D. J. Knotts  
Compliance Data Section - Mindy Jones  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michelle Boner

## **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT**

**MascoTech Sintered Components of Indiana, Inc.  
3100 North State Highway #3  
North Vernon, Indiana 47265**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 079-10884-00014	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary hot forging carbon steel rod manufacturing source.

Responsible Official: Dennis Park  
Source Address: 3100 North State Highway #3, North Vernon Indiana 47265  
Mailing Address: 3100 North State Highway #3, North Vernon Indiana 47265  
Phone Number: 812 - 346 - 0363  
SIC Code: 3462  
County Location: Jennings  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Six (6) automated deflash machines, known as EU-AD10 through AD-15, each equipped with a self-contained aerocology unit (dust collector), known as ADA10 through ADA15, exhausting through general plant ventilation, capacity: 2,183 pounds of carbon steel rods per hour.
- (b) Sixteen (16) rework sanders, known as EU-G1 through EU-G16, each equipped with a dust collector, known as D1P through D8P (previously permitted primary deflash dust collectors) for EU-G1 through EU-G8, and as D1S through D8S (previously permitted secondary deflash dust collectors) for EU-G9 through EU-G16, all exhausting through general plant ventilation, capacity: 491.41 pounds of carbon steel rods per hour, each.
- (c) Two (2) shot peen machines, known as EU-SP6 and EU-SP7, each equipped with a self-contained dust collector, known as SPD6 and SPD7, exhausting through plant general ventilation, capacity: 2,118.17 pounds of carbon rods per hour, total, and 144,000 pounds of steel shot per hour, total.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) double disk grinders, known as DD5 and DD6, equipped with a wet process for PM control, capacity: 2,139.56 pounds of carbon steel rods per hour, total. [326 IAC 6-3]

- (b) Four (4) compacting presses, known as CP6 through CP9, capacity: 2,189.08 pounds of powdered carbon steel and lubricant per hour, total. [326 IAC 6-3]
- (c) Four (4) 200-amp electric delube furnaces, known as A8 through A11, exhausted through Stacks AS8 through AS11, capacity: 2,183 pounds of powdered carbon steel per hour, total. [326 IAC 6-3]
- (d) Seven (7) 300-amp electric rotary hearth furnaces, known as B10 through B16, exhausted through Stacks BS10 through BS16, total capacity B10 through B15: 2,183 pounds of carbon steel rods per hour and capacity B16: 813.22 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (e) Seven (7) forge presses, known as F10 through F16, total capacity F10 through F15: 2,161.17 pounds of carbon steel rods per hour, capacity 16: 807.14 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (f) One (1) magna flux machine, known as MF7, capacity: 2,104.91 pounds of carbon steel rods per hour. [326 IAC 6-3]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1      Permit No Defense [IC 13]**

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions [326 IAC 2-7-1]**

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Significant Source Modification [326 IAC 2-7-10.5(h)] [326 IAC 2-7-2(d)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

### **B.6      Phase Construction Time Frame**

That pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM may revoke this approval to construct if the:

- (a) Construction of Modules 15 - 16 has not begun within eighteen (18) months from the effective date of this approval or if during the construction of Modules 15 - 16, work is suspended for a continuous period of one (1) year or more.



- (b) Construction of Modules 13 - 14, 11 - 12 and 10 has not begun within eighteen (18) months after the operation of Modules 15 - 16 or if during the construction of Modules 13 - 14, 11 - 12 and 10, work is suspended for a continuous period of one (1) year or more.

The OAM may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.

## SECTION C GENERAL OPERATION CONDITIONS

### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The potential to emit, after controls, of any criteria pollutant from the equipment listed in this permit shall not exceed 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) The dust collectors associated with the emission units listed in Sections A.2 and D.1 shall be in operation at all time the associated emission units are in operation.

### C.2 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### C.3 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

**C.4 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**C.5 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.6 Operation of Equipment [326 IAC 2-7-6(6)]**

Except as otherwise provided in this permit, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**Testing Requirements [326 IAC 2-7-6(1)]**

**C.7 Performance Testing [326 IAC 3-6]**

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

##### **C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this approval;

- (3) The Compliance Monitoring Requirements in Section D of this approval;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.11 Malfunctions Report [326 IAC 1-6-2]

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.12 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this approval;



- (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Six (6) automated deflash machines, known as EU-AD10 through AD-15, each equipped with a self-contained aerocology unit (dust collector), known as ADA10 through ADA15, exhausting through general plant ventilation, capacity: 2,183 pounds of carbon steel rods per hour.
- (b) Sixteen (16) rework sanders, known as EU-G1 through EU-G16, each equipped with a dust collector, known as D1P through D8P (previously permitted primary deflash dust collectors) for EU-G1 through EU-G8, and as D1S through D8S (previously permitted secondary deflash dust collectors) for EU-G9 through EU-G16, all exhausting through general plant ventilation, capacity: 491.41 pounds of carbon steel rods per hour, each.
- (c) Two (2) shot peen machines, known as EU-SP6 and EU-SP7, each equipped with a self-contained dust collector, known as SPD6 and SPD7, exhausting through plant general ventilation, capacity: 2,118.17 pounds of carbon rods per hour, total, and 144,000 pounds of steel shot per hour, total.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from:

- (a) Each of the six (6) deflash machine shall not exceed 4.35 pounds per hour when operating at a process weight rate of 2,183 pounds per hour (1.09 tons per hour).
- (b) Each of the sixteen (16) rework sander shall not exceed 1.60 pounds per hour when operating at a process weight rate of 491.41 pounds per hour (0.246 tons per hour).
- (c) Each of the two (2) shot peens shall not exceed 2.68 pounds per hour when operating at a process weight rate of 1,059.09 pounds per hour (0.530 tons per hour).

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

## **Compliance Determination Requirements**

### **D.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)]**

- (a) Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, the Permittee shall perform PM testing of the dust collectors D1P through D8P and D1S through D8S controlling emissions from the sixteen (16) rework sanders, known as EU-G1 through EU-G16, utilizing Methods 5 or 17 (40 CFR 60, Appendix A) or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) The Permittee is not required to test the remaining facilities in this section by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.1.1(a) and D.1.1(c) shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.1.3 Particulate Matter (PM)**

The dust collectors for PM control shall be in operation and control emissions from the six (6) deflash machines, sixteen (16) rework sanders and two (2) shot peen at all times that these facilities are in operation and exhausting to the outside atmosphere.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.4 Visible Emissions Notations**

- (a) Daily visible emission notations of the rework sanders dust collector control exhausts, D1P through D8P and D1S through D8S shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.1.5 Parametric Monitoring

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- (a) The Permittee shall record the total static pressure drop across the dust collectors, ADA 10 through ADA 15 used in conjunction with the deflashing process, at least once per day when the deflashing process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the range of 3.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (b) The Permittee shall record the total static pressure drop across the dust collectors, SPD6 and SPD7 used in conjunction with the shot peens, at least once per day when the finishing operation is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### D.1.6 Baghouse Inspections

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An inspection shall be performed each calendar quarter of all bags controlling the deflash, rework sander and shot peen operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.1.7 Broken or Failed Bag Detection

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In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.1.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the rework sander dust control exhausts.

- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Two (2) double disk grinders, known as DD5 and DD6, equipped with a wet process for PM control, capacity: 2,139.56 pounds of carbon steel rods per hour, total. [326 IAC 6-3]
- (b) Four (4) compacting presses, known as CP6 through CP9, capacity: 2,189.08 pounds of powdered carbon steel and lubricant per hour, total. [326 IAC 6-3]
- (c) Four (4) 200-amp electric delube furnaces, known as A8 through A11, exhausted through Stacks AS8 through AS11, capacity: 2,183 pounds of powdered carbon steel per hour, total. [326 IAC 6-3]
- (d) Seven (7) 300-amp electric rotary hearth furnaces, known as B10 through B16, exhausted through Stacks BS10 through BS16, total capacity B10 through B15: 2,183 pounds of carbon steel rods per hour and capacity B16: 813.22 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (e) Seven (7) forge presses, known as F10 through F16, total capacity F10 through F15: 2,161.17 pounds of carbon steel rods per hour, capacity 16: 807.14 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (f) One (1) magna flux machine, known as MF7, capacity: 2,104.91 pounds of carbon steel rods per hour. [326 IAC 6-3]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from these facilities shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

### Compliance Determination Requirement

#### D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: MascoTech Sintered Components of Indiana, Inc.  
Source Address: 3100 North State Highway #3, North Vernon, Indiana 47265  
Mailing Address: 3100 North State Highway #3, North Vernon, Indiana 47265  
Source Modification No.: 079-10884-00014

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES ?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ MascoTech Sintered Components of Indiana, Inc.    PHONE NO. : \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_ North Vernon / Jennings  
PERMIT NO. \_\_\_\_\_ 079-9994    AFS PLANT ID: \_\_\_\_\_ 079-00014    AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_\_ / \_\_\_\_\_ / 19\_\_\_\_    \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_\_ / \_\_\_\_\_ / 19\_\_\_\_    \_\_\_\_\_ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_



**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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Mail to: Permit Administration & Development Section  
Office of Air Management  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

MascoTech Sintered Components of Indiana, Inc.  
3100 North State Highway #3  
North Vernon, Indiana 47265

**Affidavit of Construction**

I, \_\_\_\_\_, being duly sworn upon my oath, depose and say:  
(Name of the Authorized Representative)

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of \_\_\_\_\_ for MascoTech Sintered Components of Indiana, Inc..  
(Title) (Company)
3. By virtue of my position with MascoTech Sintered Components of Indiana, Inc., I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of Masco Tech Sintered Components of Indiana, Inc.
4. I hereby certify that MascoTech Sintered Components of Indiana, Inc., 3100 North State Highway #3, North Vernon, Indiana 47265, has constructed the six (6) deflash machines, sixteen (16) rework sanders and two (2) shot peens and insignificant activities in conformity with the requirements and intent of the Part 70 Operating Permit application received by the Office of Air Management on April 22, 1999 and as permitted pursuant to **Part 70 Permit No. T 079-10884, Plant ID No. T 079-00014** issued on \_\_\_\_\_.
5. I hereby certify that MascoTech Sintered Components of Indiana, Inc. is subject to the Title V program and will submit a Title V operating permit application as soon as possible.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

STATE OF INDIANA)  
SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of  
Indiana on this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

My Commission expires: \_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (typed or printed)

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Source Modification to a Part 70 Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>MascoTech Sintered Components of Indiana, Inc.</b>
<b>Source Location:</b>	<b>3100 North State Highway #3, North Vernon, Indiana 47265</b>
<b>County:</b>	<b>Jennings</b>
<b>SIC Code:</b>	<b>3462</b>
<b>Operation Permit No.:</b>	<b>CP 079-9994-00014</b>
<b>Operation Permit Issuance Date:</b>	<b>February 1, 1999</b>
<b>Source Modification No.:</b>	<b>079-10884-00014</b>
<b>Permit Reviewer:</b>	<b>Frank P. Castelli</b>

The Office of Air Management (OAM) has reviewed a modification application from MascoTech Sintered Components of Indiana, Inc. relating to the operation of a hot forging carbon steel rod manufacturing source. The equipment involved in this modification consists of the following:

- (a) Six (6) automated deflash machines, known as EU-AD10 through AD-15, each equipped with a self-contained aerocology unit (dust collector), known as ADA10 through ADA15, exhausting through general plant ventilation, capacity: 2,183 pounds of carbon steel rods per hour.
- (b) Sixteen (16) rework sanders, known as EU-G1 through EU-G16, each equipped with a dust collector, known as D1P through D8P (previously permitted primary deflash dust collectors) for EU-G1 through EU-G8, and as D1S through D8S (previously permitted secondary deflash dust collectors) for EU-G9 through EU-G16, all exhausting through general plant ventilation, capacity: 491.41 pounds of carbon steel rods per hour, each.
- (c) Two (2) shot peen machines, known as EU-SP6 and EU-SP7, each equipped with a self-contained dust collector, known as SPD6 and SPD7, exhausting through plant general ventilation, capacity: 2,118.17 pounds of carbon rods per hour, total, and 144,000 pounds of steel shot per hour, total.

The equipment involved in this modification also consists of the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) double disk grinders, known as DD5 and DD6, equipped with a wet process for PM control, capacity: 2,139.56 pounds of carbon steel rods per hour, total. [326 IAC 6-3]
- (b) Four (4) compacting presses, known as CP6 through CP9, capacity: 2,189.08 pounds of powdered carbon steel and lubricant per hour, total. [326 IAC 6-3]
- (c) Four (4) 200-amp electric delube furnaces, known as A8 through A11, exhausted through Stacks AS8 through AS11, capacity: 2,183 pounds of powdered carbon steel per hour, total. [326 IAC 6-3]

- (d) Seven (7) 300-amp electric rotary hearth furnaces, known as B10 through B16, exhausted through Stacks BS10 through BS16, total capacity B10 through B15: 2,183 pounds of carbon steel rods per hour and capacity B16: 813.22 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (e) Seven (7) forge presses, known as F10 through F16, total capacity F10 through F15: 2,161.17 pounds of carbon steel rods per hour, capacity 16: 807.14 pounds of carbon steel rods per hour. [326 IAC 6-3]
- (f) One (1) magna flux machine, known as MF7, capacity: 2,104.91 pounds of carbon steel rods per hour. [326 IAC 6-3]

### **Phased Construction**

Modules 15 - 16 are going to be installed first because the equipment in these two modules is needed initially to meet the production requirement of MascoTech's customer. The Process Description, a rod will go through each piece of equipment in the process as shown in the flow diagrams. Since the process through the plant is in batches, rather than in a continuous flow, connecting rods will not be produced in one specific line or module, as it appears in the flow diagram provided with the application. For example, rods produced in the first stages of the process (compacting press, delube furnace, rotary hearth furnace, force press) in Module 16 may be taken to Module 15 to be run through the automated deflash double disk grinder, etc. As MascoTech's customer demand for the connecting rods increases, the facility will need to install Modules 14 - 13, 12 - 11 and 10 to meet the needs of the customer. The rework sanders are needed immediately to perform final finishing on the rods that are being produced in the previously permitted Modules currently.

### **History**

The TSD for Construction Permit No. 079-9994 issued February 1, 1999 stated that this source is subject to Title V and a Part 70 Operating Permit application will be submitted "as soon as possible". The source has indicated that a Part 70 Operating Permit application will be submitted within approximately two (2) months of the date contact with the applicant's consultant that was made in late May 1999.

As stated in the TSD Addendum for Construction Permit No. 079-9994 issued February 1, 1999, this plant is not a sintering plant and therefore not one of the 28 major PSD source categories. The plant performs hot forging activities and not sintering operations at the defined sintering temperature of 2,050 degrees Fahrenheit.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 079-9994-00014, issued on February 1 1999 (superceded CP 079-9498-00014,)
- (b) CP 079-9498-00014, issued on July 22 1998,
- (c) CP 079-4413-00014, issued on May 16 1995, and
- (d) CP 079-3694-00014, issued on October 25 1994.

### Enforcement Issue

- (a) IDEM is aware that the source was not issued a FESOP by December 14, 1996 nor did they submit a Part 70 application by that date.
- (b) IDEM is reviewing this matter and will take appropriate action.

### Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 22, 1999. Additional information was received on May 24 and June 10, 1999.

### Emission Calculations

#### Automated Deflash Machines

Each of the six (6) deflash machines can process 600 parts per hour, multiplied by 1,650 grams per part equals 990,000 grams per hour. There 453.59 grams in one (1) pound which results in 2,183 pounds per hour process weight rate.

The potential PM and PM<sub>10</sub> emissions before controls are calculated as follows:

$$\text{PM/PM}_{10} = 2.0 \text{ gr/acf} \times 3,000 \text{ acf/min} \times 60 \text{ min/hr} \times 8,760 \text{ hr/yr} \times 1 \text{ lb/7,000 gr} \times 1 \text{ ton/2,000 lbs}$$

$$\text{PM/PM}_{10} = 225.3 \text{ tons/yr each}$$

Total potential PM/PM<sub>10</sub> for the six (6) Deflash machines is  $6 \times 225.3 \text{ tons/yr} = 1,352 \text{ tons/yr}$ .

The potential PM and PM<sub>10</sub> emissions after controls for the six (6) machines are calculated as follows:

$$\text{PM/PM}_{10} = 6 \times 225.26 \text{ tons/yr} \times (1-.999) = 1.35 \text{ tons/yr for six machines.}$$

#### Rework Sanders

A total of sixteen (16) hand rework sanders are proposed to be tied into the previously approved primary and secondary deflash machine's dust collectors. The grinders will be used as a final step in the production process to finish the connecting rods.

Each rework sander can process 300 parts per hour, multiplied by 743 grams per part equals 222,900 grams/hour. There are 453.59 grams in one (1) pound which results in 491.41 pounds per hour maximum process rate.

The potential PM emissions before controls are calculated as follows:

$$\text{PM} = 0.005 \text{ gr/acf} \times 5,800 \text{ acf/min} \times 60 \text{ min/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ lb/7,000 gr} \times 1 \text{ ton/2,000 lbs}$$

$$\text{PM} = 1.088 \text{ tons/yr each}$$

Potential PM emissions for the sixteen (16) rework sanders is  $16 \times 1.088 \text{ tons/yr} = 17.41 \text{ tons/yr}$

Potential PM<sub>10</sub> emissions for the sixteen (16) rework sanders is

$$17.41 \text{ tons PM/yr} \times (0.25 \text{ lbs PM}_{10} / 1 \text{ lb PM}) = 4.35 \text{ tons/yr}$$

The potential PM and PM<sub>10</sub> emissions after controls for the sixteen (16) rework sanders are calculated as follows:

$$\text{PM Emissions} = 17.41 \text{ tons/yr} \times (1 - 0.995) = 0.087 \text{ tons/yr}$$

$$\text{PM}_{10} \text{ Emissions} = 4.35 \text{ tons/yr} \times (1 - 0.995) = 0.022 \text{ tons/yr}$$

### Shot Peen

The inlet grain loading at each of the shot peen dust collectors is 0.6488 grains per standard cubic foot or 13.265 pounds per hour. The filter efficiency is 99.5%. Maximum PM emissions from each dust collector outlet are 0.066 pounds per hour.

The potential PM emissions for each of the two (2) shot peens is as follows:

$$13.265 \text{ lbs/hr} \times 8,760 \text{ hrs/yr} \div 2,000 \text{ lbs/ton} = 58.10 \text{ tons/yr PM emissions, each}$$

$$\text{Or a total of } 2 \times 58.1 \text{ tons/yr} = 116.2 \text{ tons per year}$$

Typical particulate distribution indicates 25% of PM is PM<sub>10</sub> as shown below.

$$58.10 \text{ tons/year PM} \times 0.25 \text{ lb PM}_{10} / 1 \text{ lb PM} = 14.53 \text{ tons/year potential PM}_{10} \text{ emissions, each}$$

$$\text{Or a total of } 2 \times 14.53 \text{ tons/yr} = 29.1 \text{ tons per year}$$

Since the dust collection efficiency is 99.5%, the total potential PM and PM<sub>10</sub> emissions after controls for the two (2) shot peens are calculated as follows:

$$\text{PM Emissions} = 116.2 \text{ tons/yr} \times (1 - 0.995) = 0.581 \text{ tons/yr}$$

$$\text{PM}_{10} \text{ Emissions} = 29.1 \text{ tons/yr} \times (1 - 0.995) = 0.145 \text{ tons/yr}$$

### Emissions Summary

Operation	PM Before Controls (TPY)	PM After Controls (TPY)	PM <sub>10</sub> Before Controls (TPY)	PM <sub>10</sub> After Controls (TPY)
6 Deflash Machines	1352	1.35	1352	1.35
16 Rework Sanders	17.4	0.087	4.35	0.022
2 Shot Peens	116.2	0.581	29.1	0.145
Total	1486	2.02	1385	1.52

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	1,486
PM <sub>10</sub>	1,385
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00

Note: For the purpose of determining Title V applicability for particulates, PM<sub>10</sub>, not PM, is the regulated pollutant in consideration.

HAPS	Potential To Emit (tons/year)
None	0.00

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter from this source modification are greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.
- (b) The entire source potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM<sub>10</sub> is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1993 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	2.19
PM <sub>10</sub>	0.329
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00
HAPS	0.00

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	22.8
PM <sub>10</sub>	22.6
SO <sub>2</sub>	0.00
VOC	0.00
CO	0.00
NO <sub>x</sub>	0.00

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the Technical Support Document for CP 079-9994-00014, issued February 1, 1999.

### Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>x</sub> (tons/yr)
Proposed Modification	2.02	1.52	0.00	0.00	0.00	0.00
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.



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**County Attainment Status**

The source is located in Jennings County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Jennings County has been designated as attainment or unclassifiable for ozone.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

The existing source prior to this proposed modification was subject to 326 IAC 2-7 since the potential PM<sub>10</sub> emissions exceeded the Part 70 major source level of one hundred (100) tons per year. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application. Pursuant to CP 079-9994-00014 issued on February 1, 1999, the source shall submit a Part 70 Permit application as soon as possible, since it missed the submission deadline of December 14, 1996.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to avoid the applicability of this rule, the potential criteria pollutant emissions from the equipment covered in this source modification after controls shall not exceed 250 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit after controls of less than one hundred (100) tons per year of PM and PM<sub>10</sub>.

326 IAC 5-1 (Opacity Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-7-6 Compliance Requirements

Stack testing of PM emissions is being required for dust collectors D1P through D8P and D1S through D8S controlling emissions from the sixteen (16) rework sanders, known as EU-G1 through EU-G16. This testing is required to insure compliance with the allowable emission rate pursuant to 326 IAC 6-3-2. Testing is not being required for the automated deflash and the shot peen machines since stack testing of existing like facilities was completed on May 5 and 6, 1999. This testing verified that the emissions from these emission units were well within the allowable limits.

#### 326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the six (6) deflash machine shall not exceed 4.35 pounds per hour when operating at a process weight rate of 2,183 pounds per hour (1.09 tons per hour).

The dust collector connected to each of the six (6) deflash machines shall be in operation at all times the deflashing process is in operation, in order to comply with this limit. The PM emissions from each deflash machine after controls are 0.051 pounds per hour which is less than the allowable PM emission rate of 4.35 pounds per hour. Therefore, each of the six (6) Deflash machines are in compliance with this rule.

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the sixteen (16) rework sander shall not exceed 1.60 pounds per hour when operating at a process weight rate of 491.41 pounds per hour (0.246 tons per hour).

The dust collector connected to each of the sixteen (16) rework sanders shall be in operation at all times the finishing process is in operation, in order to comply with this limit. The PM emissions from each rework sander after controls are 0.001 pounds per hour which is less than the allowable PM emission rate of 1.60 pounds per hour. Therefore, each of the sixteen (16) Rework Sanders are in compliance with this rule.

- (c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the two (2) shot peens shall not exceed 2.68 pounds per hour when operating at a process weight rate of 1,059.09 pounds per hour (0.530 tons per hour).

The dust collector connected to each of the two (2) shot peens shall be in operation at all times the shot blasting is in operation, in order to comply with this limit. The PM emissions from each shot peen after controls are 0.066 pounds per hour which is less than the allowable PM emission rate of 2.68 pounds per hour. Therefore, each of the two (2) shot peens are in compliance with this rule.

- (d) Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

### 326 IAC 8

Since there are no VOC emissions from the proposed modification, none of the Article 8 rules apply.

### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) Each of the six (6) deflash machines has applicable compliance monitoring conditions as specified below:

The Permittee shall record the total static pressure drop across the dust collector controlling each deflash machine, at least once daily when the deflashing process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across baghouses ADA10 through ADA15 shall be maintained within the range of 3.0 to 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (b) Each of the sixteen (16) rework sanders has applicable compliance monitoring conditions as specified below:

Daily visible emissions notations of the rework sander dust collector exhausts D1P through D8P and D1S through D8S shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

- (c) Each of the two (2) shot peens has applicable compliance monitoring conditions as specified below:

The Permittee shall record the total static pressure drop across the dust collector controlling each shot peen, at least once daily when finishing is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across dust collectors SPD 6 and SPD7 shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the dust collectors on the deflash machines, the rework sanders and the shot peens must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 5-1 (Opacity Limitations), 326 IAC 2-2 and 326 IAC 2-7 (Part 70).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this source.

### **Conclusion**

The operation of this hot forging carbon steel rod manufacturing source shall be subject to the conditions of the attached proposed Source Modification No. 079-10884-00014.